



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
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Silver Spring, MD 20993-0002

March 11, 2016

Maquet Cardiopulmonary AG  
c/o Ms. Katrin Schwenkglenks  
Regulatory Affairs Manager  
Hechinger Strasse 38  
72145 Hirrlingen, Germany

Re: K083794

Trade/Device Name: MECC Set with Bioline Coating  
Regulation Number: 21 CFR 870.4360  
Regulation Name: Nonroller-Type Cardiopulmonary Bypass Blood Pump  
Regulatory Class: Class II  
Product Code: KFM  
Dated: April 3, 2009  
Received: April 7, 2009

Dear Ms. Schwenkglenks:

This letter corrects our substantially equivalent letter of April 21, 2009.

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA).

You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801 ); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

**Eric E. Richardson -S**

for Bram D. Zuckerman, M.D.  
Director  
Division of Cardiovascular Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)  
K083794

Device Name

MECC Set with Bioline Coating

Indications for Use (Describe)

The MECC Set with Bioline Coating is a prescription device that uses a method other than revolving rollers to pump the blood through an extracorporeal circuit for periods lasting less than 6 hours for the purpose of providing either:

- (i) Full or partial cardiopulmonary bypass (i.e., circuit includes an oxygenator) during open surgical procedures on the heart or great vessels; or
- (ii) Temporary circulatory bypass for diversion of flow around a planned disruption of the circulatory pathway necessary for open surgical procedures on the aorta or vena cava.

Type of Use (Select one or both, as applicable)

☒ Prescription Use (Part 21 CFR 801 Subpart D)

☐ Over-The-Counter Use (21 CFR 801 Subpart C)

**CONTINUE ON A SEPARATE PAGE IF NEEDED.**

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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Special 510(k): Device Modification  
MECC SET with Bioline Coating

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**510(k) SUMMARY**

**SUBMITTER:** Maquet Cardiopulmonary AG  
Hechinger Strasse 38  
72145 Hirrlingen, Germany

**CONTACT PERSON:** Katrin Schwenkglenks  
Phone: (011) 49 7478 921-151  
Fax: (011) 49 7478 921- 400

**DATE PREPARED:** December 18, 2008

**DEVICE TRADE NAME:** MECC SET with Bioline Coating

**COMMON/USUAL NAME** Minimized Extracorporeal Circulation  
System

**CLASSIFICATION NAMES** Cardiopulmonary Bypass Vascular  
Catheter, Cannula, or Tubing;  
Cardiopulmonary Bypass Adaptor,  
Stopcock, Manifold, or Fitting;  
Pump, Blood, Cardiopulmonary Bypass,  
Non-Roller Type.

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Maquet Cardiopulmonary AG, Hirrlingen, Germany

## **PREDICATE DEVICES OR LEGALLY MARKETING DEVICES**

HLM Tubing Sets with Bioline Coating (K080592)

Jostra MECC System (K023132)

## **INDICATIONS FOR USE STATEMENT**

The MECC SET with Bioline Coating is a prescription device that uses a method other than revolving rollers to pump the blood through an extracorporeal circuit for periods lasting less than 6 hours for the purpose of providing either:

- (i) Full or partial cardiopulmonary bypass (i.e., circuit includes an oxygenator) during open surgical procedures on the heart or great vessels; or
- (ii) Temporary circulatory bypass for diversion of flow around a planned disruption of the circulatory pathway necessary for open surgical procedures on the aorta or vena cava.

## **STATEMENT OF TECHNICAL CHARACTERISTICS COMPARISON**

The modified MECC SET with Bioline Coating follows the same concept of a minimized extracorporeal circuit as the Jostra MECC System (K023132) that is, the same operational principles and clinical application, benefits for the patient and risks during clinical application are comparable.

Special 510(k): Device Modification  
MECC SET with Bioline Coating

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The MECC SET with Bioline Coating corresponds to the HLM Tubing Set with Bioline Coating (K080592) with regards to the Bioline Coating of the components and with regards to the aspect that the MECC SET may be customized for the convenience of the customer.

**DETERMINATION OF SUBSTANTIAL EQUIVALENCE**

Evaluation on safety and effectiveness was executed to demonstrate that the MECC SET with Bioline Coating described in this submission is substantially equivalent to the HLM-Tubing Set with Bioline Coating with regards to the Bioline Coating and customization and to the Jostra MECC System with regards to the principles of a minimal extracorporeal circuit and its application.

**CONCLUSION**

The data given demonstrate that the MECC Set with Bioline Coating is substantially equivalent to the named predicate devices which hold currently market clearance.